

Piperacillin/tazobactam Criteria for Use

Likely Appropriate Indications	Possibly Appropriate Indications	Likely Inappropriate Indications
Genitourinary		
-Complicated pyelonephritis (sepsis, obstruction, instrumentation, perinephric abscess, kidney transplant)	None	-Cystitis -Prostatitis -Uncomplicated pyelonephritis
Gynecologic		
-Endometritis (acute post-partum) or salpingitis/PID patients who meet sepsis criteria/ICU admission	None	-Endometritis (acute postpartum) or salpingitis/PID
Intra-abdominal		
-Cholangitis -High risk/severe intra-abdominal infection: complicated cholecystitis, peritonitis, perirectal abscess, diverticulitis with abscess or perforation, or hospital-associated intra-abdominal infections (see tablet 2)	-Perforated appendicitis in high risk patients (see table 2)	-Uncomplicated intra-abdominal infections: community-onset cholecystitis, diverticulitis, appendicitis without perforation -Spontaneous bacterial peritonitis (SBP)
Respiratory		
-Hospital acquired pneumonia -CAP with ≥ 3 risk factors for resistance (see figure 1)	None	-CAP with < 3 risk factors for resistance (see figure 1) -Community-acquired aspiration
Skin/Skin Structure		
-Necrotizing fasciitis -Severe/limb threatening diabetic foot infection	None	-Bite wound (human or animal) -Septic arthritis/prosthetic joint infection -Skin infection, uncomplicated (furunculosis, cutaneous abscess, cellulitis, mild diabetic foot infection)
Other		
-Sepsis (initial 48 hr) -Directed therapy based on current culture and susceptibility data -Failure of moderately broad-spectrum antibiotics after 48 hours (ceftriaxone, ampicillin/sulbactam) -Recent history of documented infection with <i>Pseudomonas aeruginosa</i> susceptible to piperacillin-tazobactam -Recommended by ID	-fever of unknown origin -necrotizing otitis externa	-immunosuppression as the only reason cited for use -infective endocarditis -neutropenic fever

Piperacillin/tazobactam Criteria for Use

Indication	First-line alternative	Second-line alternative
Genitourinary		
Cystitis (uncomplicated)	PO: nitrofurantoin OR SMX/TMP IV: cefazolin OR ceftriaxone	PO: cephalexin (cefadroxil) IV: gentamicin or aztreonam
Prostatitis (acute)	PO: SMX/TMP OR doxycycline OR ciprofloxacin IV: ceftriaxone	
Pyelonephritis (uncomplicated)	PO SMX/TMP OR ciprofloxacin IV: ceftriaxone	
Gynecologic		
Endometritis (acute post-partum) or salpingitis/PID non-ICU	clindamycin PLUS gentamicin OR ceftriaxone PLUS metronidazole PLUS doxycycline	ampicillin/sulbactam
Intra-abdominal		
Appendicitis	cefazolin PLUS metronidazole	aztreonam PLUS metronidazole
Cholecystitis	cefazolin	aztreonam
Diverticulitis	IV: cefazolin PLUS metronidazole PO: cefuroxime OR SMX/TMP PLUS metronidazole	aztreonam PLUS metronidazole
Spontaneous Bacterial Peritonitis	ceftriaxone	ciprofloxacin
Respiratory		
CAP	PO: cefuroxime PLUS azithromycin IV: ceftriaxone PLUS azithromycin	Alternative for azithromycin: doxycycline Alternative for severe b-lactam allergy: levofloxacin
Aspiration pneumonia	PO: amoxicillin/clavulanate IV: ampicillin/sulbactam OR ceftriaxone ± metronidazole	IV and PO clindamycin IV and PO levofloxacin – severe b-lactam allergy only
Skin/Skin Structure		
Non-purulent	PO: cephalexin IV: cefazolin	clindamycin
Purulent/ulcer	PO: SMX/TMP OR doxycycline IV: cefazolin ± vancomycin	vancomycin
Mild diabetic foot infection	cefazolin	clindamycin OR SMX/TMP
Septic arthritis, Prosthetic joint infections	ceftriaxone PLUS vancomycin OR Vancomycin	aztreonam PLUS vancomycin
Bite wound	PO: amoxicillin/clavulanate IV: ampicillin/sulbactam ceftriaxone PLUS metronidazole (if amp/sulb unavailable)	IV: ceftriaxone PLUS metronidazole PO: doxycycline OR SMX/TMP PLUS metronidazole
Other		
Immunosuppression	cefepime	meropenem if severe b-lactam allergy
Neutropenic fever	cefepime ± vancomycin	meropenem ± vancomycin
Infective endocarditis	ID consult	ID consult